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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,693	07/31/2003	Francois Leitner	HOE-768	3632
20/028 7590 07/22/2008 Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468				
EXAMINER				
BRUTUS, JOEL F				
ART UNIT		PAPER NUMBER		
3768				
MAIL DATE		DELIVERY MODE		
07/22/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/632,693

Applicant(s)

LEITNER ET AL.

Examiner

JOEL F. BRUTUS

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, 8, 10-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kliegis (US Pat: 5,769,078) in view of Horbal et al (US Pat: 5,249,581).

Regarding claims 10-14, 16, and 17, Kliegis teaches a device and method to match an implant or graft regardless of its shape to a grafting site [see column 1 lines 39-41] and [see abstract]. Kliegis further teaches a machining tool for the machining of tissue or bone [see column 1 lines 45-47], a data processing unit to produce structural images of the bones or organs in the area of the proposed operation site [see column 2 lines 31-35]; the processing unit has a memory to store anatomical data of the grafting site [see column 3 lines 45-48] and [see column 2 lines 15-23]; an optical measurement device to obtain characteristic points of the operation [see column 3 lines 56-60] and to measure spatial positions of implants, tool and bones. The structural measurement data images are superimposed on the operation site with planned osteotomy lines [see column 3 lines 63-67]. The coordinates of the boundary surfaces of the graft are determined [see column 4 lines 13-15], previously measured surfaces of bones is

superimposed by computer means along with surfaces of cutting of machine tool and guided by the data processing unit [see column 4 lines 18-29].

Kliegis doesn't teach markers that are attached to the bone and the cutting tool and differences of extreme values.

However, Horbal et al teaches a plurality of LED markers that are attached to the hip bone in total hip replacement operation [see column 5 lines 1-5], a cavity is surgically formed on the pelvis [see column 5 lines 20-23], the surgeon can view on a monitor the position of LED [see column 5 lines 28-32] and the information is stored in a computer. Horbal et al also teaches differences of predetermined positional data and the measured data are displayed [see column 5 lines 61-65].

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Kliegis reference by using the Horbal et al teachings to match an implant or graft with great accuracy to a grafting site. Attaching markers to the tool and the bone would guide the surgeon to the correct position and orientation and displaying differences graphically to enhance visualization and proper alignment.

Regarding claims 1-5, 7, and 8, the combination Kliegis and Horbal et al teaches a device and a method that is pertinent to the method as claimed. It would have been obvious to one with ordinary skill in the art at the time the invention was made to use these teachings to provide a more efficient way of preparing a site to receive an implant.

Art Unit: 3737

3. Claims 15, 18, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kliegis (US Pat: 5,769,078) in view of Horbal et al (US Pat: 5,249,581) as applied to claim 10 above, and further in view of Gerig et al (5,446,548).

Regarding claims 15 and 18, Kliegis and Horbal et al teach all other limitations as set forth above.

Kliegis and Horbal et al do not teach displaying same difference in the same color and generating a warning signal when extremes exceed specific given maximum values.

However, Gerig et al teach displaying a color when a predetermined tolerance is exceeded [see column 10 lines 30-52] and within predetermined tolerance in a second color [see column 10 lines 30-52] and providing a warning signal in yellow or red depending on the set conditions. Gerig et al also teaches generating an audible signal.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to display the same difference in the same color to enhance visualization in guiding the surgeon and to form a cavity size that fits the implant properly. One with ordinary skill in the art would be motivated to use warning signal for the purpose of alerting the surgeon.

Regarding claims 6 and 9, the combination Kliegis, Gerig et al and Horbal et al teaches a device and a method that is pertinent to the method as claimed. It would have been obvious to one with ordinary skill in the art at the time the invention was

made to use these teachings to provide a more efficient way of preparing a site to receive an implant.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL F. BRUTUS whose telephone number is (571)270-3847. The examiner can normally be reached on Mon-Fri 7:30 AM to 5:00 PM (Off alternative Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Casler Brian can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art
Unit 3737

Art Unit: 3737

/J. F. B./

Examiner, Art Unit 3768